PTO/SB/21 (09-04)
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TRANSMITTAL FORM

OIPE NOV 22 2005 PATENT & TRADEMARK OFFICE IAP15

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 37

Application Number	10/720,778
Filing Date	November 24, 2003
First Named Inventor	Johnson et al.
Art Unit	2856
Examiner Name	Fitzgerald, John P.
Attorney Docket Number	ADU-1

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☑ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please Identify below):
  Documents to support petition
  Post Card

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	BROWN & MICHAELS, PC		
Signature			
Printed name	Lynda Wood		
Date	11/14/05	Reg. No.	53,791

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Justin Wood	Date	11/14/05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OIPE IAP15 NOV 22 2005 PATENT & TRADEMARK OFFICE

November 14, 2005

Serial No:	10/720,778
Applicant:	Johnson et al.
Filed:	11-24-2003
Title:	DEVICE FOR COLLECTION STATISTICAL DATA FOR MAINTENANCE OF SMALL-ARMS
Art Unit:	2856
Examiner:	Fitzgerald, John P.
Confirmation Number:	8646
Attorney Docket No.:	2003-1

HONORABLE COMMISSIONER OF PATENTS
Alexandria, VA 22313-1450

PETITION TO WITHDRAW HOLDING OF ABANDONMENT UNDER 37 CFR §1.181

The above-identified application became abandoned on June 13, 2005 for failure of payment of issue fee in response to a notice of allowance mailed on March 11, 2005. The notice of allowance was mailed to the incorrect correspondence address and was never received by Applicant's representative. A notice of abandonment was also mailed to the incorrect correspondence address on October 13, 2005. Applicant's representative was just informed of both actions.

According to *Delgar v. Schulyer*, 172 USPQ 513 (D.D.C. 1971), the court decided that the Office should mail a new Notice of Allowance in view of the evidence presented in support of the contention that the applicant's representative did not receive the original Notice of Allowance. Under the reasoning of *Delgar*, an allegation that an Office action was never

CERTIFICATE OF MAILING

Certified Mail No.: 7004 0750 0003 0307 1229 Date: November 14, 2005

I hereby certify that this correspondence is being deposited in the U.S. Postal Service as Certified Mail with a return receipt requested, in an envelope addressed to the Commissioner of Patents Alexandria VA 22313-1450.

Justin Wood

received may be considered in a petition to withdraw the holding of abandonment. If adequately supported, the Office may grant the petition to withdraw the holding of abandonment and remail the Office action. That is, the reasoning of *Delgar* is applicable regardless of whether an application is held abandoned for failure to timely pay the issue fee (35 U.S.C. 151) or for failure to prosecute (35 U.S.C. 133) as stated in MPEP 711.03(c).

For the establishment of non-receipt of the Notice of Allowance, the Applicant's representative responded to an office action in the above case on December 27, 2004, in which a new power of attorney for the patent application was filed. The power of attorney called for all correspondence to be addressed to the address under USPTO Customer Number 020808, which is:

BROWN & MICHAELS, PC
400 M & T BANK BUILDING
118 NORTH TIOGA ST
ITHACA, NY 14850.

A notice of allowance was then mailed, based on the December 27, 2004 responses of Applicant's representative on March 11, 2005 to the incorrect correspondence address, disregarding the power of attorney and the change of correspondence address filed December 27, 2004. As seen on the notice of allowance and the notice of abandonment, the notices were both sent to:

Advanced Design Consulting Inc.
126 Ridge Rd.
PO Box 187
Lansing, NY 14882-0187.

Applicant's representative could have in no way received a copy of the original notice of allowance or the notice of abandonment.

Therefore, Applicant hereby petitions for the withdrawal of the holding of abandonment and a new mailing of the notice of allowance to Applicant's representative. The petition is timely

filed with in two months of the mailing of the notice of abandonment on October 13, 2005. Also attached in support of the petition is the following:

- Notice of Allowance
- Notice of Abandonment
- Power of Attorney
- Office Action Response
- Postcard Associated With Office Action Response

Respectfully Submitted:
Johnson et al.

By:_____
Lynda Wood, Reg. No. 53,791
Agent for Applicant

BROWN & MICHAELS, P.C.
400 M&T Bank Building - 118 N. Tioga St.
Ithaca, NY 14850
(607) 256-2000 • (607) 256-3628 (fax)
e-mail: docket@bpmlegal.com
Dated: November 14, 2005

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,778	11/24/2003	Eric Arthur Johnson	2003-1	8646

34468 7590 10/13/2005

ADVANCED DESIGN CONSULTING, INC.
126 RIDGE RD.,
P.O. BOX 187
LANSING, NY 14882-0187

OIPE IAP15
NOV 22 2005
PATENT & TRADEMARK OFFICE

EXAMINER	
FITZGERALD, JOHN P	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

OIPE IAP15
NOV 2 2 2005
PATENT & TRADEMARK OFFICE

Notice of Abandonment	Application No.	Applicant(s)	
	10/720,778	Johnson	
	Examiner	Art Unit	
	Fitzgerald	2856	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–

This application is abandoned in view of:

1. ☐ Applicant's failure to timely file a proper reply to the Office letter mailed on _____.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
   (d) ☐ No reply has been received.

2. ☒ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☒ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

lgd

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

OIPE IAP15 NOV 22 2005 PATENT & TRADEMARK OFFICE

OIPE JC17 DEC 27 2004 PATENT & TRADEMARK OFFICE

In re application of: Johnson et al.
Serial No.: 10/720,778
Filing Date: November 24, 2003
Title: A DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL ARM
Art Unit: 2856
Examiner: John P. Fitzgerald
Attorney Docket no.: ADU-1

POWER OF ATTORNEY FOR PATENT APPLICATION

Advanced Design Consulting USA, Inc., having offices at 126 Ridge Rd. P.O. 187 Lansing, NY 14882, as assignee of the above-named US patent application, hereby appoints the registered attorneys and agents associated with USPTO Customer Number 020808 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

- Address all telephone calls to Michael F. Brown at telephone number 607-256-2000.
- Fax communications should be sent to telephone number 607-256-3628.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file"

- E-mail communications should be addressed to: docket@bpmlegal.com.
- Address all correspondence to USPTO Customer Number 020808.

Signed,
Advanced Design Consulting USA, Inc.

By: Alexander K. Deyhim
Name: Alexander K. Deyhim, President
Date: 11/18/04

OIPE JC17 DEC 27 2004 PATENT & TRADEMARK OFFICE
OIPE IAP15 NOV 22 2005 PATENT & TRADEMARK OFFICE

In re Application of: Johnson et al.
Serial No.: 10/720,778
Filing Date: November 24, 2003
Title: A DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL ARM
Art Unit: 2856
Examiner: John P. Fitzgerald
Attorney Docket no.: ADU-1

POWER OF ATTORNEY FOR PATENT APPLICATION

Eric Arthur Johnson and Joseph Duane Kulesza., being the inventors and applicants in the above-named US patent application, hereby appoint the registered attorneys and agents associated with USPTO Customer Number 020808 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

- Address all telephone calls to Michael F. Brown at telephone number 607-256-2000.
- Fax communications should be sent to telephone number 607-256-3628.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file"

- E-mail communications should be addressed to: docket@bpmlegal.com.
- Address all correspondence to USPTO Customer Number 020808.

Signed,

Eric Arthur Johnson
Date: 11/18/04

Joseph Duane Kulesza
Date: 11/18/04

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

34468 7590 03/11/2005

ADVANCED DESIGN CONSULTING, INC.
126 RIDGE RD.,
P.O. BOX 187
LANSING, NY 14882-0187

OIPE IAP15
NOV 22 2005
PATENT & TRADEMARK OFFICE

EXAMINER	
FITZGERALD, JOHN P	
ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 03/11/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,778	11/24/2003	Eric Arthur Johnson	2003-1	8646

TITLE OF INVENTION: DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL-ARMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$0	$700	06/13/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

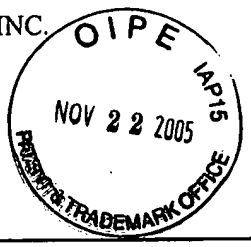
or Fax **(703) 746-4000**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

34468 7590 03/11/2005

ADVANCED DESIGN CONSULTING, INC.
126 RIDGE RD.,
P.O. BOX 187
LANSING, NY 14882-0187



Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,778	11/24/2003	Eric Arthur Johnson	2003-1	8646

TITLE OF INVENTION: DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL-ARMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$0	$700	06/13/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
FITZGERALD, JOHN P	2856	073-167000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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OIPE IAP15
NOV 22 2005
PATENT & TRADEMARK OFFICE

Notice of Allowability

Application No.	Applicant(s)	
10/720,778	JOHNSON ET AL.	
Examiner	**Art Unit**	
John P. Fitzgerald	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *27 December 2004*.

2. ☒ The allowed claim(s) is/are *35-85*.

3. ☒ The drawings filed on *27 December 2004* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

OIPE IAP15 NOV 22 2005 PATENT & TRADEMARK OFFICE

DETAILED ACTION

Drawings

1. The drawings were received on 27 December 2004. These drawings are accepted.

Allowable Subject Matter

2. Claims 35-85 are allowed over the Prior Art of record.

3. The following is an examiner's statement of reasons for allowance: The primary reasons for allowance of the independent claims 35, 56, 57 is the inclusion of the limitation of a device and/or method for collecting data from small-arms (i.e. pistols, rifles, etc) including a single accelerometer coupled to a processor having an a ***threshold level*** (emphasis added), above which a shot is sensed, the processor further having a ***hold-off delay*** (emphasis added) (i.e. period delay, time delay) after a shot is sensed such that additional signals sensed by the accelerometer are not sensed as shots until after the hold-off delay is over, the hold-off delay being chosen such that all subsequent impulses produced during the firing a shot fall within the hold-off delay. As to claim 65, the primary reasons for allowance is the inclusion of the limitations of a device for collecting data on usuage of a firearm having a barrel, having an RF (i.e. radio-frequency) detector mounted to the firearm producing a signal on a signal output in response to sensing a radio-frequency impulse; a processor having an input coupled to the signal output, such that a signal on the output of the RF detector which exceeds a ***threshold level*** (emphasis added) is a sensed shot, a memory coupled to the processor for storing information related to shots sensed by the processor. None of the Prior Art teach the employment of a "hold-off delay" or a "threshold

level" which is to be exceeded in measuring/detecting the firing of a shot from a small arm, weapon, gun, firearm, etc.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Glock teaches a piezoelectric device assembled from a piezofilm sensor enclosed between two layers of a multilayer board with a printed circuit which is capable of detecting movements, hits or other disturbances, typically employed in conjunction with a pistol (see Fig. 2), Cain teaches the employment of an RF tag for gun identification and use and Delgado teaches an emitter that detects when shells are ejected from a breech of a firearm.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF
03/07/2005

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

December 20, 2004

Serial No.	10/720,778
Applicant:	Johnson et al.
Filed:	11/24/2003
Title:	A DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL-ARMS
Art Unit:	2856
Examiner:	Fitzgerald, John P.
Confirmation Number:	8646
Attorney Docket No.:	ADU-1

HONORABLE COMMISSIONER OF PATENTS
Alexandria, VA 22313-1450

AMENDMENT

AND RESPONSE TO OFFICE ACTION

In response to the Office Action dated September 23, 2004, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

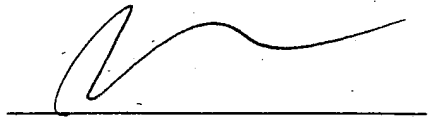
Amendments to the Drawings begin on page 10 of this paper and include two attached replacement sheets.

Remarks/Arguments begin on page 11 of this paper.

CERTIFICATE OF MAILING

Certified Mail No.: 7004 0750 0003 0307 3049 Date: December 21, 2004

I hereby certify that this correspondence is being deposited in the U.S. Postal Service as Certified Mail with a return receipt requested, in an envelope addressed to the Commissioner of Patents Alexandria VA 22313-1450.



Justin R. Wood

Amendments to the Specification:

Pursuant to 37 C.F.R. § 1.121(b) kindly amend the specification as follows. Amendments to the specification are made by presenting replacement paragraphs or sections marked up to show changes made relative to the immediate prior version. The changes in any amended paragraph or section are being shown by strikethrough (for deleted matter) or underlined (for added matter).

Page 7, in the Brief Description of the drawings, reverse the descriptions of figures 5 and 6, to match the detailed description of the drawing and the drawing sheet as amended:

Figure 5 is ~~a graph of an idealized accelerometer's frequency response~~ a cross-sectional view of an accelerometer with a mechanical filter that may be used as a sensor.

Figure 6 is ~~a cross-sectional view of an accelerometer with a mechanical filter that may be used as a sensor~~ a graph of an idealized accelerometer's frequency response.

Page 14, second paragraph (first full paragraph):

Figure 7 shows a typical accelerometer signal response to a single shot fired by a typical automatic or semi-automatic weapon. The first peak **71** is the result of the shot itself, the second peak **72** is generated by the bolt hitting the back of the bolt housing, and the third peak **73** is generated by the bolt forcing the next round into the chamber and rotating the lock closed. This third peak **73** ~~is~~ may not be present in ~~a~~ some weapon types after the final round contained within a magazine has been fired.

Amendments of the Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1.–34. (Cancelled)

35. (New) A device for collecting data on usage of a firearm having a barrel, comprising:

a single accelerometer mounted on the firearm producing a signal on a signal output in response to sensing an impulse in the weapon;

a processor having an input coupled to the signal output, such that a signal on the signal output of the accelerometer which exceeds a threshold level is sensed as a shot,

the processor having a hold-off delay after a shot is sensed such that additional signals on the signal output of the accelerometer are not sensed as shots until after the hold-off delay, the hold-off delay being chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay;

a memory coupled to the processor, for storing information related to shots sensed by the processor.

36. (New). The device of claim 35, in which the information stored in the memory comprises an interval between firing of shots.

37. (New) The device of claim 36, in which the interval between shots is used by the processor to derive a fire rate for the firearm, and the information stored in the memory comprises a maximum fire rate.

38. (New) The device of claim 35, further comprising a temperature sensor coupled to the barrel of the firearm and the processor, in which the information stored in the memory comprises temperature of the barrel as each shot is fired.

39. (New) The device of claim 38, further comprising at least one amplifier having an input coupled to the temperature sensor and an output coupled to the processor.

40. (New) The device of claim 39, in which the processor is programmed to apply power to the amplifier only during a measurement period, such that power consumption is reduced.

41. (New) The device of claim 38, in which the temperature sensor is a thermocouple in contact with the barrel.

42. (New) The device of claim 38, in which the temperature sensor is an infrared detector.

43. (New) The device of claim 35, further comprising an interface coupled to the processor, for transferring data from the device to an external data collection device.

44. (New) The device of claim 43, further comprising an external data collection device comprising a programmed computer coupled to the processor through the interface.

45. (New) The device of claim 35, in which the information stored in the memory is stored as a histogram.

46. (New) The device of claim 35, in which the information stored in the memory comprises date and time that each shot was fired.

47. (New) The device of claim 35, in which the memory is non-volatile memory.

48. (New) The device of claim 35, in which the information stored in the memory comprises identifying data regarding the weapon, selected from the group comprising serial number, barrel number, model number and last date of service.

49. (New) The device of claim 35, in which the hold-off delay is variable.

50. (New) The device of claim 35, further comprising a case housing at least the processor and the memory.

51. (New) The device of claim 50, in which the device further comprises clips for attaching the case to the barrel, and a thermal insulator applied to the case, for providing thermal insulation between the case and the barrel.

52. (New) The device of claim 51, further comprising a temperature sensor embedded within a contact surface of the thermal insulator, such that the sensor is in contact with the barrel of the firearm when the case is mounted to the barrel by the clips, the sensor being coupled to the processor, and the information stored in the memory comprises temperature of the barrel as each shot is fired.

53. (New) The device of claim 50, in which the device further comprises a strap for attaching the case to the barrel and a plurality of segments of thermal insulator for providing thermal insulation between the case and the barrel, the segments being clamped to the barrel by the strap, the case being attached to one of the plurality of segments.

54. (New) The device of claim 53, further comprising a temperature sensor passing through one of the segments of thermal insulator, such that the sensor is in contact with the barrel of the firearm when the case is mounted to the barrel by the strap, the sensor being coupled to the processor, and the information stored in the memory comprises temperature of the barrel as each shot is fired.

55. (New) The device of claim 50, in which the case further comprises a mounting rail for mounting the case to the barrel, and a heat shield for providing thermal insulation between the case and the barrel.

56. (New) An electronic system for collecting data from small-arms, comprising:

at least one device for collecting data on usage of a firearm having a barrel, comprising:

a single accelerometer mounted on the firearm producing a signal on a signal output in response to sensing an impulse in the weapon;

a processor having an input coupled to the signal output, such that a signal on the signal output of the accelerometer which exceeds a threshold level is sensed as a shot,

the processor having a hold-off delay after a shot is sensed such that additional signals on the signal output of the accelerometer are not sensed as shots until after the hold-off delay, the hold-off delay being chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay;

a memory coupled to the processor, for storing information related to shots sensed by the processor; and

an interface coupled to the processor, for transferring data from the device;

an external data collection device comprising a programmed computer coupled to the processor through the interface.

57. (New) A method of collecting data on usage of a firearm having a barrel, comprising the steps of:

mounting a single accelerometer on the firearm, the accelerometer producing a signal on a signal output in response to sensing an impulse in the weapon;

processing the signal in a processor, such that a signal on the signal output of the accelerometer which exceeds a threshold level is sensed as a shot,

after a shot is sensed, starting a hold-off delay, such that additional signals on the signal output of the accelerometer are not sensed as shots until after the hold-off delay, the hold-off delay being chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay;

storing information related to shots sensed by the processor in a memory.

58. (New) The method of claim 57, in which step of storing information comprises storing an interval between firing of shots.

59. (New) The method of claim 58, further comprising the steps of deriving a fire rate for the firearm from the interval between shots, and in which step of storing information comprises storing a maximum fire rate in the data.

60. (New) The method of claim 58, further comprising the step of sensing barrel temperature after a shot is detected and in which step of storing information comprises storing information on barrel temperature in the memory.

61. (New) The method of claim 57, in which the step of storing information comprises storing date and time that each shot was fired in the memory.

62. (New) The method of claim 57, in which the information stored in the memory is stored as a histogram.

63. (New) The method of claim 57, further comprising the step of storing identifying data in the memory regarding the weapon, selected from the group comprising serial number, barrel number, model number and last date of service.

64. (New) The method of claim 57, further comprising the step of unloading the stored information from the memory to an external data collection device comprising a programmed computer coupled to the processor through an interface.

65. (New) A device for collecting data on usage of a firearm having a barrel, comprising:

an RF detector mounted on the firearm producing a signal on a signal output in response to sensing a radio-frequency impulse;

a processor having an input coupled to the signal output, such that a signal on the signal output of the RF detector which exceeds a threshold level is sensed as a shot,

a memory coupled to the processor, for storing information related to shots sensed by the processor.

66. (New) The device of claim 65, in which the information stored in the memory comprises an interval between firing of shots.

67. (New) The device of claim 66, in which the interval between shots is used by the processor to derive a fire rate for the firearm, and the information stored in the memory comprises a maximum fire rate.

68. (New) The device of claim 65, further comprising a temperature sensor coupled to the barrel of the firearm and the processor, in which the information stored in the memory comprises temperature of the barrel as each shot is fired.

69. (New) The device of claim 68, further comprising at least one amplifier having an input coupled to the temperature sensor and an output coupled to the processor.

70. (New) The device of claim 69, in which the processor is programmed to apply power to the amplifier only during a measurement period, such that power consumption is reduced.

71. (New) The device of claim 68, in which the temperature sensor is a thermocouple in contact with the barrel.

72. (New) The device of claim 68, in which the temperature sensor is an infrared detector.

73. (New) The device of claim 65, further comprising an interface coupled to the processor, for transferring data from the device to an external data collection device.

74. (New) The device of claim 73, further comprising an external data collection device comprising a programmed computer coupled to the processor through the interface.

75. (New) The device of claim 65, in which the information stored in the memory is stored as a histogram.

76. (New) The device of claim 65, in which the information stored in the memory comprises date and time that each shot was fired.

77. (New) The device of claim 65, in which the memory is non-volatile memory.

78. (New) The device of claim 65, in which the information stored in the memory comprises identifying data regarding the weapon, selected from the group comprising serial number, barrel number, model number and last date of service.

79. (New) The device of claim 65, in which the hold-off delay is variable.

80. (New) The device of claim 65, further comprising a case housing at least the processor and the memory.

81. (New) The device of claim 80, in which the device further comprises clips for attaching the case to the barrel, and a thermal insulator applied to the case, for providing thermal insulation between the case and the barrel.

82. (New) The device of claim 81, further comprising a temperature sensor embedded within a contact surface of the thermal insulator, such that the sensor is in contact with the barrel of the firearm when the case is mounted to the barrel by the clips, the sensor being coupled to the processor, and the information stored in the memory comprises temperature of the barrel as each shot is fired.

83. (New) The device of claim 80, in which the device further comprises a strap for attaching the case to the barrel and a plurality of segments of thermal insulator for providing thermal insulation between the case and the barrel, the segments being clamped to the barrel by the strap, the case being attached to one of the plurality of segments.

84. (New) The device of claim 83, further comprising a temperature sensor passing through one of the segments of thermal insulator, such that the sensor is in contact with the barrel of the firearm when the case is mounted to the barrel by the strap, the sensor being coupled to the processor, and the information stored in the memory comprises temperature of the barrel as each shot is fired.

85. (New) The device of claim 80, in which the case further comprises a mounting rail for mounting the case to the barrel, and a heat shield for providing thermal insulation between the case and the barrel.

Amendments to the Drawings:

The attached sheet(s) of drawings include changes as listed below. The attached replacement sheet(s) replace the original sheet(s).

The changes are as follows.

Page 3/12 is amended to reverse the labels for figures 5 and 6, to match the detailed description as filed.

Page 5/12 was erroneously filed with two copies of the same bar graph (figure 8A, rounds fired vs. firing interval). The page has been corrected to change the second figure on the page to the 8B graph of rounds fire vs. barrel temperature, as described in the specification as filed, page 14, first paragraph.

Attachment: Two Replacement Sheets

REMARKS

The office action of September 23, 2004 has been reviewed and its contents carefully noted. Reconsideration of this case, as amended, is requested. Claims 1 through 34 are cancelled by this response. Claims 35 through 85 are added by this response and remain in this case. Support for the newly added claims is found in the specification and no new matter has been added.

Preliminary Remarks

a. The claims have been completely replaced, in order to better focus on the invention presented in the application as filed. Specifically,

i. New claim 35 is directed to a device for collecting data, as in old claim 1, in the embodiment using a single accelerometer. Of the claims dependent upon claim 35, new claim 36 is equivalent to old claim 2, new claim 43 is equivalent to old claim 5, and new claims 45-48 are derived from old claims 6-9, respectively.

ii. New claim 56 is directed to a system for collecting data on small arms, using the device as claimed in new claim 35.

iii. New claims 57-64 are directed to a method of collecting small-arms usage data, by using the single accelerometer as claimed in apparatus claim 35.

iv. New claims 65-85 are directed to a device for collecting data, in the embodiment using an RF detector as a sensor rather than the accelerometer of claims 35-55, with claims 66-85 being parallel to claims 36-55.

b. The numbered paragraphs below correspond to the numbered paragraphs in the Office Action.

c. The nonpublication request filed with this application has been rescinded by form filed by fax on November 30, 2004.

Rejection(s) under 35 U.S.C. §112

2. Claim 31 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant has cancelled claim 31, rendering the rejection moot. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection(s) under 35 U.S.C. §102

4. Claims 15-18, 20, 21, 23, 24, 24, 29, 30, and 33-35 were rejected under 35 U.S.C. 102(b) as being anticipated by US 5,402,678 to Fritz et al.

The rejected claims have been replaced. Applicant believes the new claims are patentable over Fritz, et al. Specifically, Fritz uses a proximity sensor (4) to sense the physical position of the breech-block of the fire arm. New Claims 35-64 of the present invention claim the use of a single accelerometer sensing the signals resulting from firing, and claims 65-95 claim the use of an RF sensor to sense radio signals resulting from the firing. Fritz does not teach or suggest sensing conditions (acceleration or RF) resulting from firing.

Therefore, it is respectfully suggested that the rejection the claims as being anticipated by Fritz, et al, is overcome. Reconsideration and withdrawal of the rejection are respectfully requested.

5. Claims 15-18, 20, 21, 27, 29, and 30 were rejected under 35 U.S.C. 102(b) as being anticipated by US 5,566,486 to Brinkley.

The rejected claims have been replaced. Applicant believes the new claims are patentable over Brinkley. Specifically, Brinkley counts signals created by an inertia switch comprising a movable mass, to generate an electrical signal, such as by completing an electrical circuit, in response to each time the firearm recoils. (col. 3, lines 40-43). Brinkley discusses ignoring extraneous signals resulting from bouncing of the ball, but does not teach or discuss the problem of additional signals resulting from the action of the gun itself, with the use of a "hold-off delay

being chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay" (new claims 35-64). Brinkley also does not teach or discuss the use of an RF sensor (new claims 65-85).

Therefore, it is respectfully suggested that the rejection the claims as being anticipated by Brinkley is overcome. Reconsideration and withdrawal of the rejection are respectfully requested.

6. Claims 15, 16, 21, 23, 24, 27, 29, 20, and 32-35 were rejected under 35 U.S.C. 102(b) as being anticipated by US 6,643,968 to Glock. Applicant respectfully disagrees with the rejection.

The rejected claims have been replaced. Applicant believes the new claims are patentable over Glock. Specifically, Glock discloses a shot counter using a piezoelectric sensor and a second sensor which senses the physical location of the carriage when it slides back, so that Glock's device depends on a signal created by the shot to start the count, and a signal from physical position of the carriage to end it. Glock neither teaches nor suggests Applicant's use of a single accelerometer with a hold-off delay (new claims 35-64) or RF sensor (new claims 65-85). In fact, by using the physical carriage sensor in addition to the piezo sensor, Glock teaches away from the Applicant's invention which uses the accelerometer, as claimed in claims 35-64.

Therefore, it is respectfully suggested that the rejection the claims as being anticipated by Glock is overcome. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection(s) under 35 U.S.C. §103

8. Claims 1-9 and 10-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,541,191 to Morris et al. in view of US 20030167909A1 to Matter. Applicant respectfully disagrees.

The rejected claims have been replaced. Applicant believes the new claims are patentable over Morris, et al, in view of Matter.

Morris is a shot counter which uses a "detector module" to detect the firing of a weapon. Morris does indicate that the detector could be an accelerometer, but rather than utilize a hold-off delay as required by claims 35-64, Morris indicates that "it is to be understood that multiple detectors may be employed in series or in parallel to prevent false activation signals."(col.2, line 43) Morris does not teach or suggest use of an RF detector as required by new claims 65-85.

Matter is an automatic bolt operator for rifles, which electrically cycles the bolt, rather than using gas operation as in the prior art. It does not collect information related to shots. Matter uses a temperature sensor to control the speed of extraction, and also to control a cooling fan or the like if the barrel overheats and control a heater if the mechanism is too cold, but not to acquire information about the usage of the weapon. Matter's device does not sense a shot being fired (with a single accelerometer, RF sensor, or otherwise), but rather physically senses the trigger being pulled "The controller 50 ... responds to the trigger 42 by cycling the bolt 52 after a suitable delay for the round to exit the barrel 16." With such a mechanical actuation, there is no need for Matter to have a hold-off delay to prevent extra counts - indeed, Matter is not concerned with counting shots at all.

The combination of Morris and Matter would result in a rifle which operates its bolt by a motor when a detector module detects the weapon was fired, or a shot counter which senses shots by a physical depression of the trigger. Since neither Morris nor Matter teaches or suggests the single accelerometer and hold-off delay "chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay ", and neither teaches or suggests use of an RF detector, the combination of the two would not teach these features required by the present claims.

Reconsideration and withdrawal of the rejection are respectfully requested.

9. Claims 19, 25, 26, 28, 31, and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,402,678 to Fritz et al. as applied to claim 15 above, and further in view of US 20030167909A1 to Matter. Applicant respectfully disagrees

For the sake of brevity, the arguments made with regard to Fritz in section 4, and Matter in section 8, above, are repeated here by reference. Suffice it to say that neither Fritz nor Matter teaches or suggests the use of an accelerometer or RF detector in a shot counter.

Fritz detects a shot by the physical movement of the breech block, and Matter is a device to move the breech block when a shot is detected. The combination of Fritz and Matter would result in a rifle which operates its bolt by a motor when a detects the trigger pull, and then counts the shot when the bolt action is operated (which would be unnecessary, since the mechanism itself was operating the bolt). Since neither Fritz nor Matter teaches or suggests the use of an accelerometer and hold-off delay "chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay ", and neither teaches or suggests use of an RF detector, the combination of the two would not teach these features required by the present claims.

Reconsideration and withdrawal of the rejection are respectfully requested.

10. Claim 22 was rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,402,678 to Fritz et al. as applied to claim 15 above, and further in view of US 6,311,682 to Rice at al. Applicant respectfully disagrees.

For the sake of brevity, the arguments made with regard to Fritz in section 4, above, are repeated here by reference. Suffice it to say that neither Fritz nor Rice teaches or suggests the use of an accelerometer or RF detector in a shot counter.

Rice is a paintball gun with a built-in processor which can control the rate of fire, etc. In the Rice device there is no accelerometer or RF sensor to detect firing or any need for such - "operation of the gun is initiated by a user depressing a trigger 2 which acts upon a microswitch in known manner." (col. 2, lines 1-3). The processor may record various parameters based on shots fired, but it is the processor which fires the gun which also records the data, so there is no need to detect a shot - the processor caused the shot in the first place.

Fritz detects a shot by the physical movement of the breech block, and Rice is a device to fire a paintball gun. The combination of Fritz and Matter would result in Fritz, basically - a shot counter which physically detects that the weapon has been fired (by bolt position from Fritz, or

by trigger microswitch from Rice). Since neither Fritz nor Rice teaches or suggests the use of an accelerometer and hold-off delay "chosen such that all subsequent impulses produced during firing a shot fall within the hold-off delay ", and neither teaches or suggests use of an RF detector, the combination of the two would not teach these features required by the present claims.

Reconsideration and withdrawal of the rejection are respectfully requested.

Conclusion

Applicant believes the claims, as amended, are patentable over the prior art, and that this case is now in condition for allowance of all claims therein. Such action is thus respectfully requested. If the Examiner disagrees, or believes for any other reason that direct contact with Applicants' attorney would advance the prosecution of the case to finality, he is invited to telephone the undersigned at the number given below.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file."

Respectfully Submitted:
Johnson et al.

By: _____
Michael F. Brown, Reg. No. 29,619
Attorney for Applicant

BROWN & MICHAELS, P.C.
400 M&T Bank Building - 118 N. Tioga St.
Ithaca, NY 14850
(607) 256-2000 • (607) 256-3628 (fax)
e-mail: docket@bpmlegal.com
Dated: December 20, 2004

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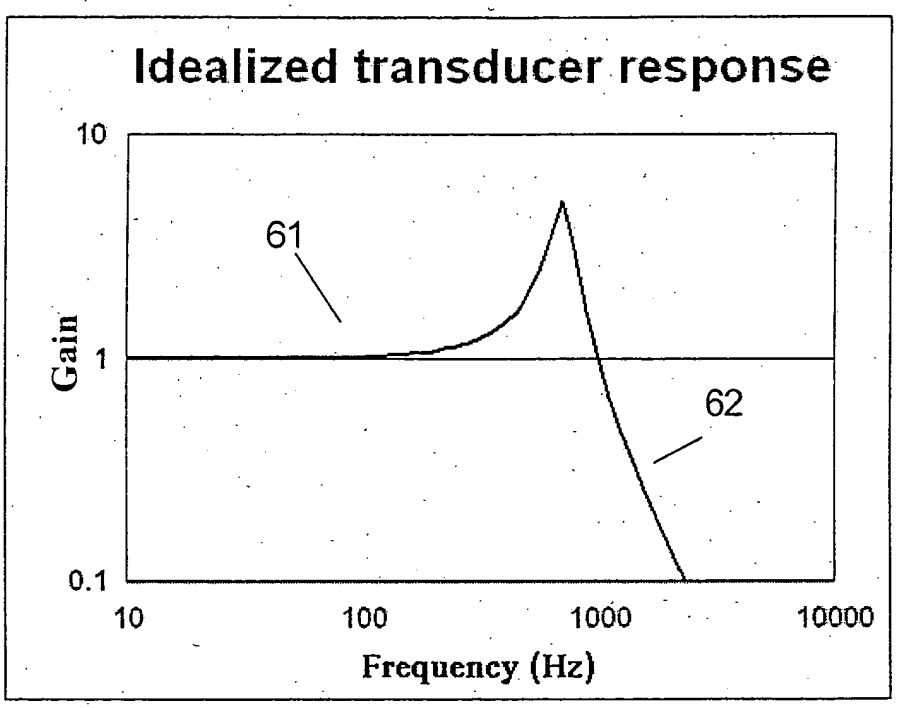

FIGURE 6

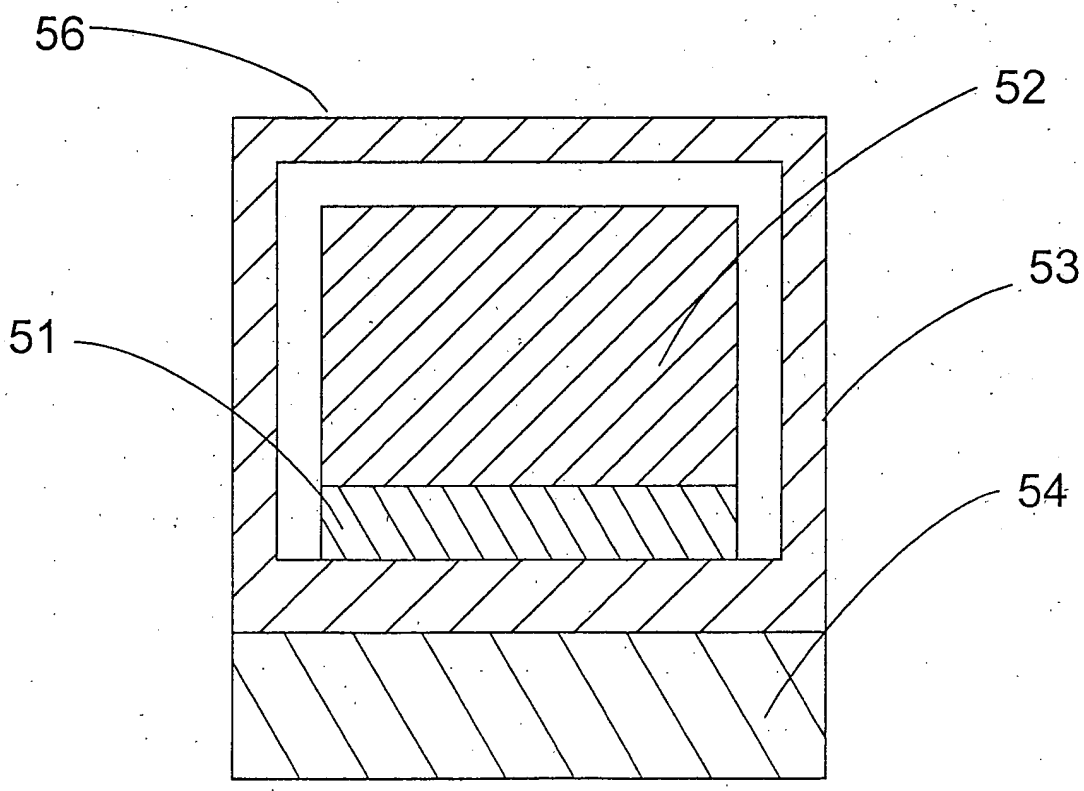

FIGURE 5

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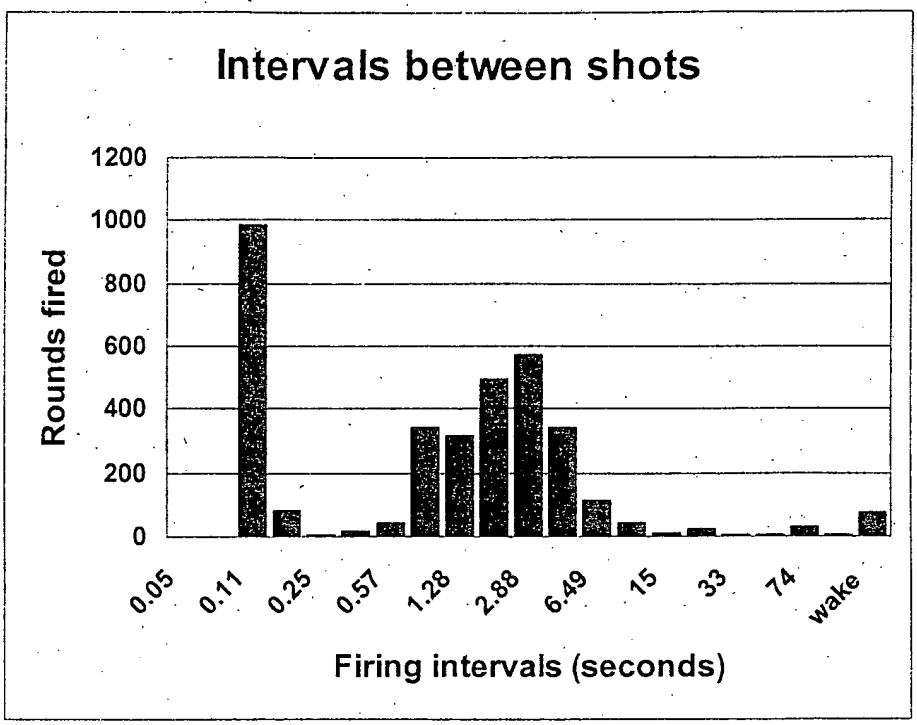
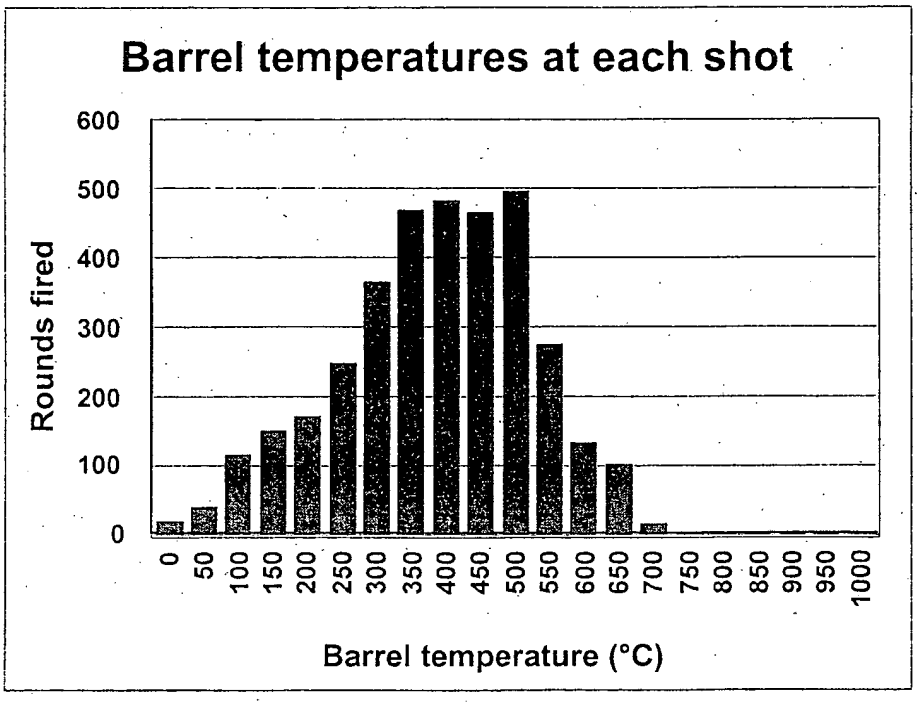


FIGURE 8A (ABOVE) AND 8B (BELOW)



OIPE
NOV 22 2005
PATENT & TRADEMARK OFFICE
1AP15

In re Application of: Johnson et al.
Serial No.: 10/720,778
Filing Date: November 24, 2003
Title: A DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL ARM
Art Unit: 2856
Examiner: John P. Fitzgerald
Attorney Docket no.: ADU-1

POWER OF ATTORNEY FOR PATENT APPLICATION

Eric Arthur Johnson and Joseph Duane Kulesza., being the inventors and applicants in the above-named US patent application, hereby appoint the registered attorneys and agents associated with USPTO Customer Number 020808 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

- Address all telephone calls to Michael F. Brown at telephone number 607-256-2000.
- Fax communications should be sent to telephone number 607-256-3628.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file"

- E-mail communications should be addressed to: docket@bpmlegal.com.
- Address all correspondence to USPTO Customer Number 020808.

Signed,

Eric Arthur Johnson
Date: 11/18/04

Joseph Duane Kulesza
Date: 11/18/04

OIPE IAP15
NOV 22 2005
PATENT & TRADEMARK OFFICE

In re Application of: Johnson et al.
Serial No.: 10/720,778
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Title: A DEVICE FOR COLLECTING STATISTICAL DATA FOR MAINTENANCE OF SMALL ARM
Art Unit: 2856
Examiner: John P. Fitzgerald
Attorney Docket no.: ADU-1

POWER OF ATTORNEY FOR PATENT APPLICATION

Advanced Design Consulting USA, Inc., having offices at 126 Ridge Rd. P.O. 187 Lansing, NY 14882, as assignee of the above-named US patent application, hereby appoints the registered attorneys and agents associated with USPTO Customer Number 020808 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

- Address all telephone calls to Michael F. Brown at telephone number 607-256-2000.
- Fax communications should be sent to telephone number 607-256-3628.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file"

- E-mail communications should be addressed to: docket@bpmlegal.com.
- Address all correspondence to USPTO Customer Number 020808.

Signed,
Advanced Design Consulting USA, Inc.

By: Alexander K. Deyhim
Name: Alexander K. Deyhim, President
Date: 11/18/04

PTO/SB/21 (09-04)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission: 22

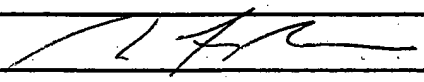
Application Number	10/720,778
Filing Date	11/24/03
First Named Inventor	Johnson et al.
Art Unit	8646
Examiner Name	Fitzgerald, John P.
Attorney Docket Number	ADU-1

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☑ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☑ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☑ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☑ Other Enclosure(s) (please Identify below):
  Post Card

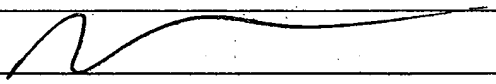
Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	BROWN & MICHAELS, PC		
Signature			
Printed name	Michael F. Brown		
Date	12/21/04	Reg. No.	29,619

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Justin Wood	Date	12/21/04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 525.00

Complete if Known	
Application Number	10/720,778
Filing Date	11/24/03
First Named Inventor	Johnson et al.
Examiner Name	Fitzgerald, John P.
Art Unit	8646
Attorney Docket No.	ADU-1

METHOD OF PAYMENT (check all that apply)

☑ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 02-0910 Deposit Account Name: Brown & Michaels PC

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☑ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee ($)	FILING FEES Small Entity Fee ($)	SEARCH FEES Fee ($)	SEARCH FEES Small Entity Fee ($)	EXAMINATION FEES Fee ($)	EXAMINATION FEES Small Entity Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
51 - 20 or HP =	17 x	25 =	425

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
4 - 3 or HP =	1 x	100 =	100

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims Fee ($)	Fee Paid ($)

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
- 100 =	/ 50 =	(round up to a whole number) x	125 =	0

4. OTHER FEE(S)

	Fees Paid ($)
Non-English Specification, $130 fee (no small entity discount)	
Other: _____	

SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 29,619	Telephone
Name (Print/Type)	Michael F. Brown		Date 12/21/04

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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